

Scaled data based on original data using
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: LUMARK

Report Number: P1445011

Luminaire Tested: XAS180-SFPM (4000K-72W-T4-HSS)

Issue Date: 5/5/2026

Test Information

Test Method: LM-79-2024
Report Number: P1445011
TEST IS SCALED FROM IESNA LM-79-24 TEST DATA ()
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/5/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: LUMARK
Catalog Number: XAS180-SFPM (4000K-72W-T4-HSS)
Description: XAS180 ALL-SELECTABLE AREA SITE LUMINAIRE.
LUMEN OUTPUT - 40% (72W)
OPTICS - TYPE 4 WITH HOUSE SIDE SHIELD
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: 24748 (1 lamp)
Luminaire Lumens: 10631.5 lumens
Efficiency: 43.0%
Efficacy: 151.4 lumens/watt
Luminous Opening: Rectangular (W 0.29m x L: 0.35m x H: 0m)
IES Classification: Type IV - Short - Full Cutoff
BUG Rating: B3 - U0 - G3

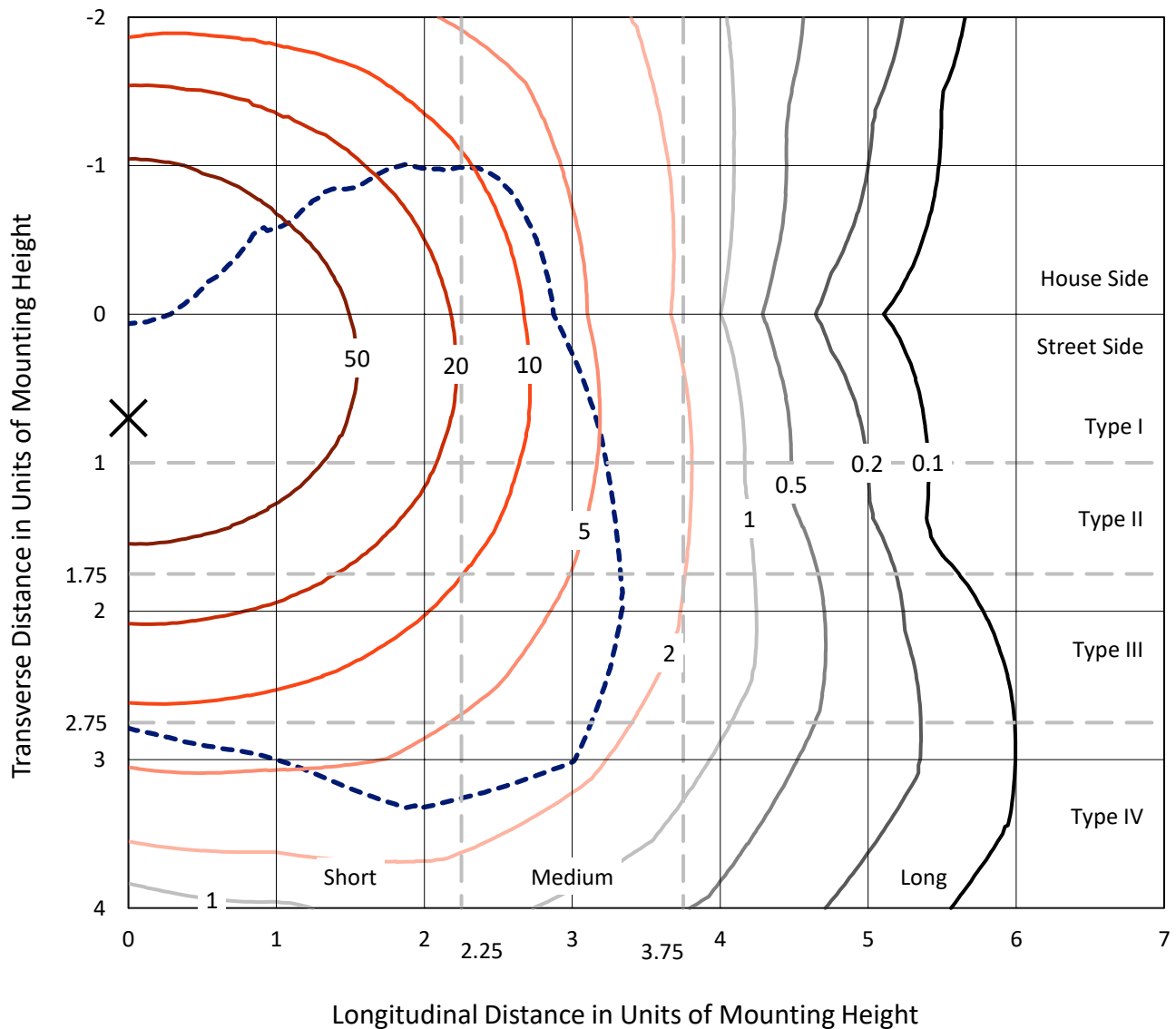
Input Watts (W): 70.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT

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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

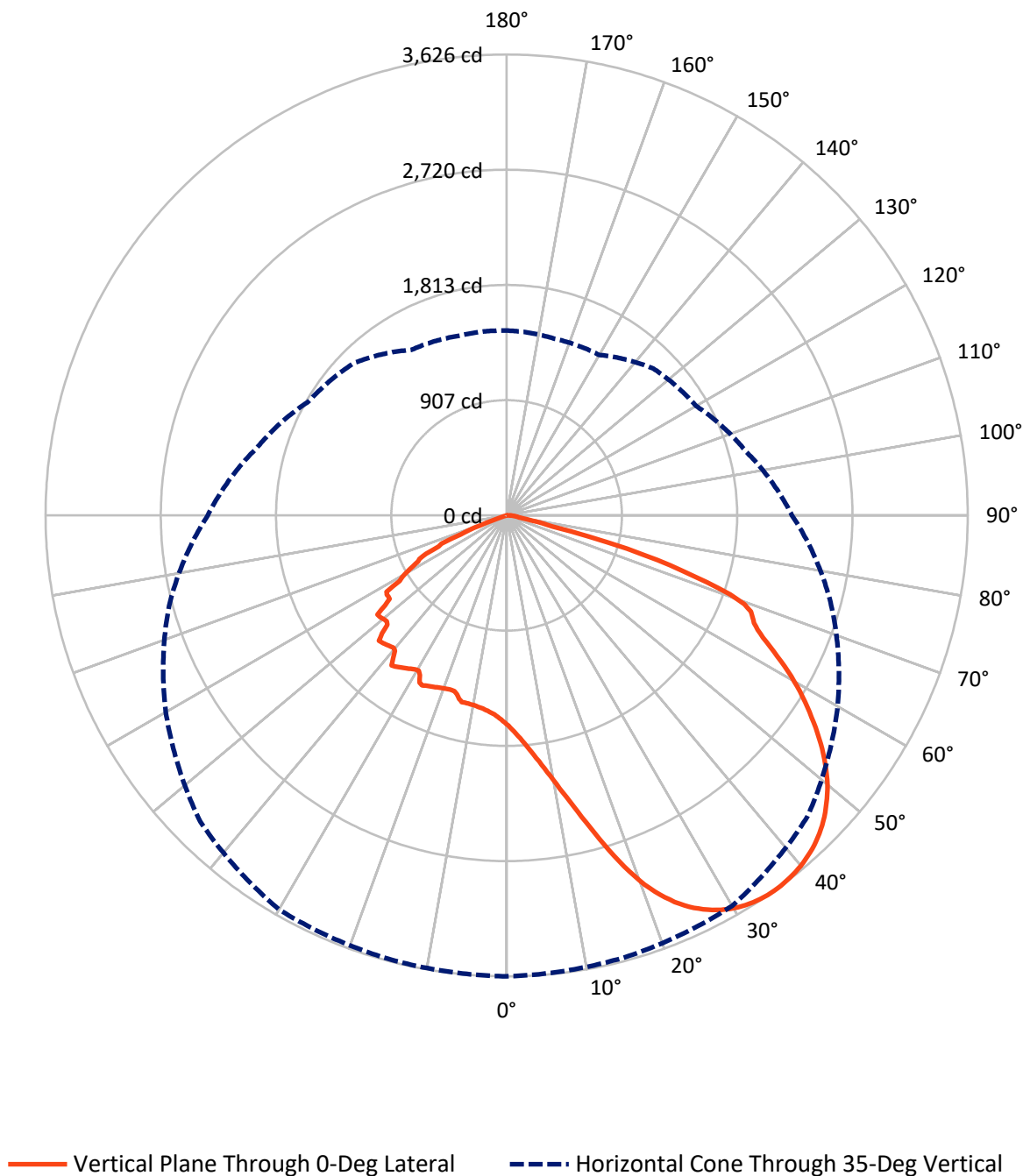


Based on 3 foot mounting height. Maximum calculated value = 286.9 fc
Type IV - Short - Full Cutoff

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Luminous Intensity Polar Plot



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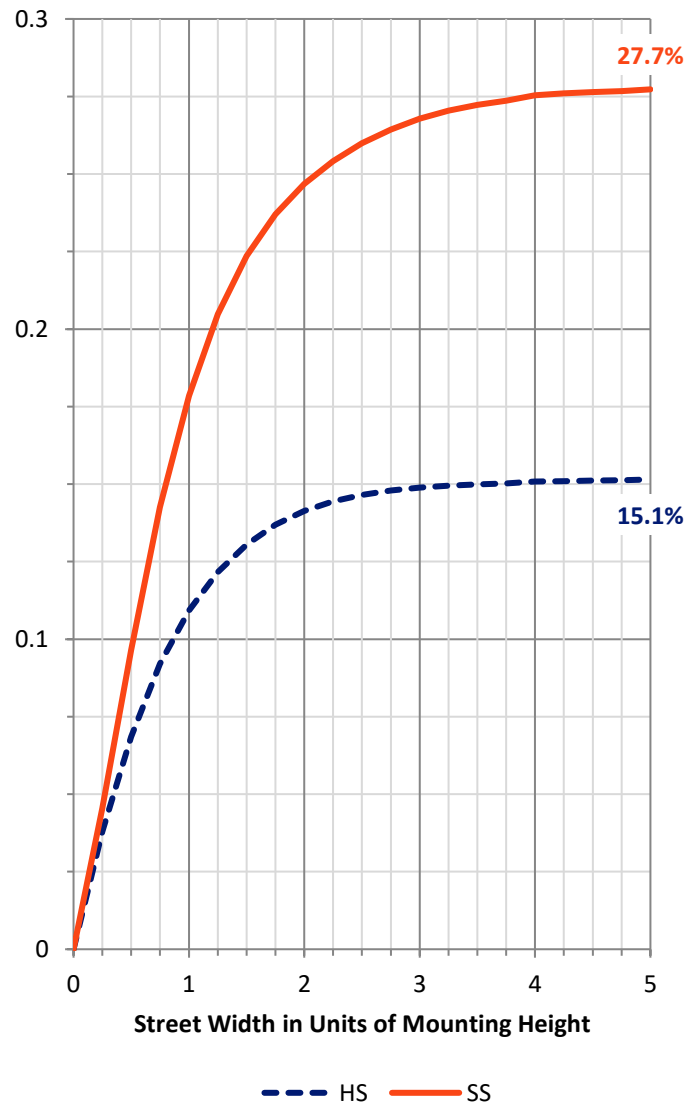
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3766.4	0.0	3766.4
	% Lamp	15.2	0.0	15.2
Street Side	Lumens	6865.2	0.0	6865.2
	% Lamp	27.7	0.0	27.7
Total	Lumens	10631.5	0.0	10631.5
	% Lamp	43.0	0.0	43.0

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	164.1	1.5	0.7
10°-20°	554.6	5.2	2.2
20°-30°	1048.6	9.9	4.2
30°-40°	1541.7	14.5	6.2
40°-50°	1947.4	18.3	7.9
50°-60°	2156.3	20.3	8.7
60°-70°	2028.8	19.1	8.2
70°-80°	1105.7	10.4	4.5
80°-90°	84.4	0.8	0.3
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-90°	10631.5	100.0	43.0
0°-180°	10631.5	100.0	43.0

Coefficient of Utilization



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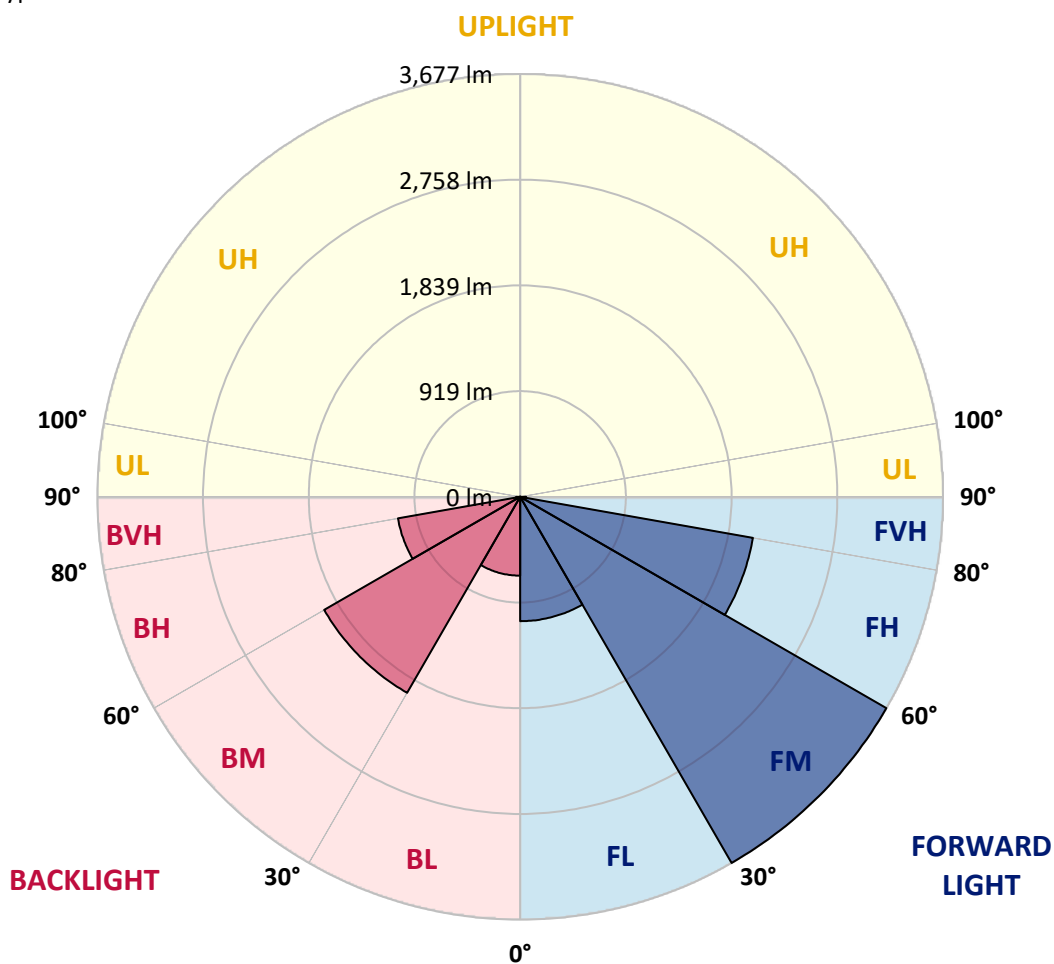
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Lamp	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1081.7	4.4			
FM	(30°-60°)	3677.2	14.9			
FH	(60°-80°)	2055.3	8.3			G2/5000
FVH	(80°-90°)	51.0	0.2			G1/100
BL	(0°-30°)	685.6	2.8	B2/1000		
BM	(30°-60°)	1968.2	8.0	B2/2500		
BH	(60°-80°)	1079.2	4.4	B3/2500		G3/2500
BVH	(80°-90°)	33.4	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	
Trapped Light		14116.5	57.0			

BUG Rating: B3-U0-G3

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
0°	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7
1°	1684.4	1683.7	1681.8	1677.5	1671.1	1664.3	1650.6	1644.2	1639.1	1634.2	1630.9
2°	1718.6	1716.6	1711.0	1700.8	1687.3	1672.6	1651.3	1638.2	1626.5	1617.2	1610.5
3°	1755.9	1753.2	1742.7	1726.2	1705.9	1683.5	1654.6	1634.1	1616.6	1602.9	1592.6
4°	1797.7	1792.8	1777.4	1754.9	1726.8	1696.4	1658.7	1632.0	1608.8	1590.6	1577.6
5°	1845.2	1837.8	1817.4	1786.3	1749.7	1710.4	1664.3	1630.7	1602.8	1580.7	1565.9
6°	1896.4	1886.8	1861.0	1821.8	1775.0	1725.8	1671.0	1630.8	1597.9	1573.4	1556.2
7°	1951.9	1939.9	1908.9	1861.1	1802.6	1743.6	1679.5	1632.8	1594.7	1567.7	1548.6
8°	2012.4	1997.8	1959.6	1902.3	1832.6	1762.8	1690.4	1636.6	1593.9	1563.2	1542.6
9°	2078.0	2060.0	2014.8	1946.7	1865.9	1783.7	1702.3	1641.3	1594.3	1560.4	1537.6
10°	2149.1	2127.8	2074.5	1994.7	1900.9	1806.2	1715.0	1647.2	1596.5	1559.7	1533.8
11°	2225.9	2201.0	2138.1	2045.7	1938.0	1831.3	1729.4	1654.6	1599.4	1560.1	1532.0
12°	2308.3	2279.1	2205.9	2099.5	1976.8	1857.0	1744.8	1662.9	1603.8	1561.6	1531.6
13°	2397.1	2363.0	2278.4	2158.2	2018.1	1884.9	1761.0	1671.8	1608.7	1563.9	1532.4
14°	2492.6	2454.9	2357.2	2218.9	2061.2	1913.3	1777.5	1680.9	1613.8	1567.1	1533.2
15°	2595.0	2550.0	2440.7	2284.5	2106.4	1941.6	1794.7	1691.2	1620.2	1570.8	1535.3
16°	2700.5	2651.9	2526.1	2352.4	2154.6	1972.4	1813.6	1701.9	1627.2	1574.5	1537.4
17°	2807.8	2752.5	2612.2	2422.5	2204.6	2004.0	1832.8	1713.5	1634.8	1579.1	1529.2
18°	2911.0	2849.8	2697.4	2492.7	2257.5	2037.0	1851.8	1723.0	1642.7	1584.6	1502.4
19°	3009.7	2944.2	2782.4	2562.2	2311.3	2070.1	1865.0	1729.8	1647.0	1590.4	1483.6
20°	3100.7	3033.7	2863.4	2630.8	2365.0	2101.5	1881.7	1738.4	1649.6	1594.8	1472.9
21°	3180.9	3113.9	2941.4	2697.8	2420.3	2130.5	1900.3	1753.1	1654.0	1574.3	1477.3
22°	3251.0	3188.6	3014.0	2762.3	2474.6	2163.8	1923.7	1767.4	1664.2	1557.5	1482.6
23°	3315.7	3254.7	3082.1	2823.6	2528.5	2198.4	1947.3	1780.1	1673.8	1547.6	1488.8
24°	3371.8	3313.9	3146.1	2882.8	2575.3	2236.8	1969.1	1790.6	1680.3	1540.9	1496.2
25°	3420.9	3366.9	3204.4	2939.3	2619.8	2277.7	1988.7	1803.2	1687.3	1547.9	1503.6
26°	3462.6	3412.7	3257.8	2993.4	2665.5	2317.7	2009.8	1817.2	1695.5	1551.6	1512.4
27°	3499.4	3453.1	3306.6	3046.0	2709.2	2356.4	2032.5	1834.1	1707.6	1556.1	1520.7
28°	3530.7	3487.4	3351.9	3095.2	2751.7	2390.1	2057.3	1851.7	1714.7	1562.6	1528.9
29°	3557.0	3516.7	3391.6	3140.9	2793.4	2424.6	2084.8	1869.0	1705.4	1574.0	1537.9
30°	3578.9	3541.0	3428.1	3186.0	2835.5	2459.7	2112.8	1887.0	1705.9	1585.3	1545.2
31°	3596.2	3561.2	3459.6	3226.8	2875.2	2494.5	2141.4	1904.6	1701.0	1597.2	1547.5
32°	3608.5	3576.0	3486.2	3260.8	2912.8	2530.1	2170.2	1917.9	1705.0	1608.6	1501.8
33°	3617.9	3587.1	3510.6	3292.8	2947.0	2566.3	2198.7	1925.0	1701.6	1617.8	1463.9
34°	3624.0	3594.4	3529.9	3321.2	2977.4	2602.0	2225.2	1933.5	1711.0	1625.7	1449.1
35°	3626.2	3598.0	3547.0	3347.7	3006.1	2637.2	2244.2	1947.5	1720.9	1632.9	1457.3
36°	3625.2	3599.6	3559.4	3373.2	3034.3	2670.4	2261.2	1962.3	1732.8	1641.2	1465.7
37°	3620.6	3597.1	3569.0	3396.1	3061.3	2702.6	2281.8	1977.7	1744.5	1639.3	1472.2
38°	3613.5	3593.0	3575.1	3416.0	3087.3	2734.4	2306.9	1994.6	1752.7	1594.4	1477.8
39°	3604.3	3585.9	3578.6	3433.5	3112.5	2764.2	2330.6	2009.3	1760.2	1558.9	1486.2
40°	3592.1	3577.3	3577.4	3448.5	3136.7	2787.9	2354.6	2022.6	1773.4	1549.5	1497.2
41°	3576.0	3565.3	3574.7	3462.5	3160.1	2807.5	2378.7	2035.0	1789.7	1561.2	1507.9
42°	3557.9	3551.2	3567.9	3474.8	3183.0	2825.5	2402.7	2044.5	1805.6	1573.8	1517.1
43°	3535.3	3534.5	3558.8	3484.2	3206.0	2846.5	2423.0	2054.3	1821.9	1586.9	1485.0
44°	3508.8	3514.6	3547.1	3489.6	3227.6	2868.5	2441.6	2072.6	1838.8	1599.1	1433.5

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CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
45°	3479.0	3492.1	3531.5	3491.1	3247.3	2891.6	2457.7	2094.5	1851.8	1607.1	1412.1
46°	3444.3	3465.8	3513.9	3488.9	3267.1	2914.2	2469.9	2116.8	1856.0	1612.4	1419.9
47°	3405.2	3435.0	3494.3	3483.0	3285.8	2936.3	2480.6	2137.4	1856.3	1621.3	1426.5
48°	3364.3	3400.5	3470.6	3474.0	3301.8	2956.7	2490.5	2148.8	1826.4	1631.8	1431.8
49°	3318.4	3361.6	3442.7	3463.2	3314.2	2978.3	2506.8	2156.2	1801.5	1599.1	1439.3
50°	3267.2	3318.2	3411.1	3448.8	3322.0	2996.9	2526.4	2160.9	1792.8	1548.5	1447.2
51°	3211.6	3270.0	3373.4	3431.1	3326.4	3012.4	2545.8	2158.0	1786.1	1526.7	1419.3
52°	3150.1	3217.3	3332.3	3408.9	3328.4	3025.5	2564.3	2172.8	1798.7	1538.4	1342.4
53°	3086.6	3159.1	3287.1	3383.4	3326.2	3037.2	2581.9	2181.3	1806.5	1550.6	1318.0
54°	3019.1	3095.8	3236.9	3355.5	3323.1	3043.0	2597.7	2186.3	1814.9	1559.3	1329.3
55°	2948.6	3029.7	3182.1	3322.7	3315.2	3043.3	2608.5	2196.7	1828.9	1567.4	1341.9
56°	2876.5	2960.5	3126.2	3286.0	3305.9	3041.4	2613.5	2202.8	1844.2	1569.7	1354.2
57°	2803.8	2890.1	3065.9	3247.6	3293.3	3034.1	2612.7	2205.8	1852.0	1515.6	1364.5
58°	2729.0	2816.1	3003.8	3205.1	3276.1	3029.1	2607.9	2211.5	1858.2	1466.5	1295.3
59°	2652.3	2744.0	2940.1	3159.1	3254.2	3023.2	2605.5	2211.4	1827.5	1464.9	1241.4
60°	2571.1	2668.9	2874.2	3110.5	3225.5	3013.0	2600.6	2201.9	1789.2	1482.4	1244.7
61°	2487.8	2591.1	2806.8	3058.6	3191.3	2997.8	2590.3	2189.7	1778.0	1501.3	1249.0
62°	2400.6	2511.8	2741.5	3003.3	3151.5	2976.1	2577.7	2183.3	1783.2	1519.7	1198.7
63°	2315.8	2431.6	2677.2	2946.5	3107.8	2946.4	2555.9	2166.2	1787.9	1482.8	1127.6
64°	2234.5	2354.4	2615.6	2887.7	3056.4	2907.4	2526.4	2146.1	1787.0	1436.5	1113.2
65°	2169.8	2283.3	2554.6	2826.5	3000.3	2860.9	2490.2	2116.3	1767.6	1435.9	1099.6
66°	2121.4	2226.5	2496.3	2765.5	2937.8	2803.0	2447.1	2076.8	1705.8	1444.8	1004.6
67°	2094.2	2184.0	2444.1	2703.5	2867.2	2737.3	2397.4	2025.7	1680.3	1385.7	989.3
68°	2063.8	2155.2	2397.7	2641.2	2785.8	2662.2	2313.0	1971.0	1690.1	1353.0	926.8
69°	1995.8	2124.1	2359.3	2580.2	2698.3	2560.1	2175.2	1907.2	1694.8	1348.6	864.3
70°	1864.5	2067.9	2328.5	2519.0	2610.1	2423.4	1982.4	1814.3	1690.9	1283.1	801.6
71°	1662.3	1959.7	2299.4	2458.0	2504.1	2251.0	1769.2	1687.3	1636.3	1262.4	701.0
72°	1455.2	1784.9	2264.0	2393.5	2381.6	2054.6	1576.5	1537.8	1569.0	1214.4	628.2
73°	1234.3	1563.4	2207.4	2329.7	2240.5	1852.9	1400.6	1391.4	1494.2	1176.2	560.2
74°	983.7	1325.8	2100.5	2253.0	2081.2	1658.9	1194.7	1261.8	1407.1	1108.7	473.4
75°	669.2	1067.8	1917.2	2145.5	1902.3	1437.1	909.5	1120.1	1295.7	1041.0	422.5
76°	371.0	757.6	1680.4	1988.3	1714.8	1136.8	624.3	899.1	1195.8	922.7	378.0
77°	286.7	432.9	1427.1	1763.2	1506.7	750.4	339.3	676.4	1097.3	804.4	333.1
78°	204.4	329.9	1120.9	1454.5	1248.4	417.5	163.4	390.3	907.5	685.7	286.6
79°	122.0	227.6	735.4	1093.1	910.3	276.7	122.9	283.1	717.8	541.2	237.7
80°	108.0	125.3	400.7	719.4	561.0	141.3	82.6	175.9	527.3	412.1	200.9
81°	96.6	108.7	303.9	375.8	408.4	117.1	70.0	69.0	283.8	303.1	180.7
82°	86.2	96.1	210.3	249.2	258.4	100.0	59.4	55.0	208.6	242.0	178.4
83°	76.5	84.6	116.7	130.5	108.3	81.9	49.5	43.5	133.3	191.8	146.7
84°	67.4	73.9	97.4	106.7	87.8	63.8	40.4	34.6	60.1	147.5	112.8
85°	58.6	64.0	79.2	90.5	69.7	50.0	31.6	27.2	51.5	103.2	78.9
86°	50.1	55.0	64.5	75.4	53.6	40.2	23.6	20.9	40.6	59.2	45.3
87°	41.8	46.4	51.9	58.8	41.4	30.6	16.3	15.4	30.0	33.5	28.2
88°	36.1	39.0	40.3	40.7	30.1	20.9	11.5	10.9	20.8	23.0	19.4
89°	30.5	31.6	31.1	28.9	18.8	12.7	6.6	6.4	11.7	12.4	10.5

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CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1445011
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
0°	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7	1654.7
1°	1629.2	1629.3	1631.2	1634.8	1639.8	1644.9	1652.2	1653.4	1660.7	1668.0	1674.5
2°	1606.8	1606.6	1609.5	1616.0	1624.5	1635.8	1648.8	1657.0	1671.9	1686.1	1699.3
3°	1587.2	1586.5	1590.3	1598.5	1611.5	1627.4	1646.8	1662.3	1684.2	1706.8	1726.8
4°	1570.5	1569.7	1574.4	1584.7	1600.7	1621.7	1646.7	1668.9	1699.2	1729.7	1757.4
5°	1558.1	1556.7	1561.6	1573.7	1592.0	1617.2	1647.9	1677.4	1715.6	1754.8	1790.8
6°	1547.2	1545.1	1551.2	1565.2	1585.7	1614.1	1650.7	1687.4	1734.0	1782.3	1826.8
7°	1537.9	1535.7	1542.2	1557.9	1581.8	1613.5	1655.2	1699.4	1754.2	1812.6	1867.8
8°	1530.8	1528.2	1535.1	1552.8	1579.2	1614.6	1661.3	1712.1	1776.1	1845.9	1911.2
9°	1524.4	1521.9	1529.6	1549.1	1578.1	1616.8	1668.0	1725.8	1799.8	1881.0	1958.1
10°	1519.9	1516.7	1525.4	1547.2	1578.2	1619.9	1675.8	1741.5	1825.2	1918.4	2008.0
11°	1516.3	1513.0	1522.9	1546.3	1580.0	1624.9	1685.3	1759.2	1853.5	1958.2	2061.2
12°	1514.2	1510.9	1521.2	1546.9	1583.2	1630.8	1696.4	1777.0	1881.9	2000.6	2117.9
13°	1513.9	1510.0	1521.1	1548.2	1587.7	1638.1	1707.9	1796.2	1912.5	2045.5	2179.1
14°	1514.0	1509.5	1522.1	1551.1	1593.2	1646.1	1720.2	1816.2	1943.5	2092.4	2243.5
15°	1512.3	1491.0	1520.7	1554.4	1599.0	1655.2	1733.2	1837.8	1976.4	2142.9	2312.3
16°	1480.3	1460.6	1491.2	1557.9	1605.1	1665.3	1747.0	1859.0	2010.8	2194.2	2384.7
17°	1456.5	1442.6	1468.3	1552.0	1611.9	1675.5	1762.1	1881.8	2046.0	2249.3	2459.1
18°	1444.0	1439.4	1456.1	1525.9	1620.0	1686.3	1775.4	1904.4	2083.1	2306.7	2533.9
19°	1445.9	1441.6	1457.8	1509.0	1627.3	1694.2	1784.7	1923.5	2121.1	2364.8	2608.6
20°	1449.1	1444.7	1461.5	1500.4	1633.9	1699.6	1795.9	1942.4	2160.1	2424.2	2680.7
21°	1453.4	1449.6	1466.3	1504.2	1620.4	1706.5	1811.8	1964.1	2195.5	2484.8	2750.5
22°	1459.5	1455.1	1472.6	1510.8	1600.8	1719.0	1829.5	1989.2	2231.5	2543.4	2816.5
23°	1465.8	1462.4	1480.4	1518.2	1591.8	1732.1	1847.6	2016.5	2271.5	2601.8	2879.6
24°	1472.8	1469.4	1488.6	1526.7	1589.0	1743.0	1862.2	2043.9	2313.5	2657.4	2939.4
25°	1480.1	1476.1	1496.3	1535.7	1596.4	1751.4	1876.0	2068.7	2357.9	2706.5	2995.1
26°	1487.7	1484.1	1504.7	1546.2	1603.1	1760.2	1891.1	2092.1	2403.0	2751.5	3048.6
27°	1495.2	1492.3	1512.8	1555.9	1608.5	1771.1	1907.5	2117.2	2447.7	2796.2	3100.2
28°	1503.1	1484.0	1521.2	1565.8	1615.3	1780.2	1926.9	2144.3	2489.5	2839.2	3149.4
29°	1479.3	1431.2	1502.8	1575.6	1626.5	1777.4	1946.6	2173.0	2526.4	2880.8	3196.1
30°	1429.7	1402.9	1452.3	1583.7	1638.9	1775.1	1966.3	2203.1	2565.2	2922.5	3239.7
31°	1405.5	1406.4	1427.7	1587.0	1651.6	1775.0	1985.8	2234.3	2603.1	2961.9	3281.3
32°	1410.3	1417.4	1431.6	1550.3	1664.8	1775.5	2001.5	2265.4	2639.1	2999.5	3319.0
33°	1420.2	1429.0	1441.5	1512.9	1676.7	1775.2	2011.5	2295.9	2676.4	3035.7	3352.1
34°	1430.0	1440.9	1451.7	1496.4	1686.3	1784.7	2021.6	2326.3	2712.1	3067.4	3380.5
35°	1440.0	1454.1	1461.9	1502.8	1695.7	1795.2	2037.1	2350.7	2748.3	3095.1	3407.5
36°	1451.0	1466.1	1472.8	1513.1	1703.2	1807.0	2053.7	2370.8	2782.1	3122.7	3433.1
37°	1460.7	1477.4	1483.6	1520.7	1707.5	1820.2	2070.7	2393.5	2814.8	3149.0	3457.1
38°	1470.2	1486.5	1493.9	1527.1	1663.9	1830.4	2090.0	2419.1	2846.3	3175.7	3477.2
39°	1477.1	1432.2	1502.1	1534.1	1629.8	1839.4	2108.9	2444.6	2876.2	3200.7	3494.6
40°	1421.1	1380.1	1452.4	1545.2	1619.6	1852.4	2124.9	2469.7	2901.7	3224.3	3509.5
41°	1370.5	1369.0	1399.3	1557.0	1629.7	1869.6	2139.0	2495.1	2921.4	3247.8	3522.5
42°	1358.8	1376.8	1384.6	1567.7	1642.5	1887.7	2149.0	2520.1	2939.2	3271.1	3532.6
43°	1368.0	1385.4	1393.9	1546.7	1656.2	1905.5	2159.9	2543.6	2958.2	3293.3	3540.6
44°	1378.1	1393.5	1404.7	1491.5	1669.3	1923.9	2180.8	2564.9	2977.8	3313.3	3545.4

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
45°	1388.5	1401.6	1415.0	1465.5	1678.7	1938.6	2204.2	2583.8	2998.8	3332.1	3545.4
46°	1399.0	1406.4	1425.7	1471.2	1685.0	1944.2	2227.7	2596.3	3020.8	3348.8	3541.1
47°	1409.1	1349.7	1434.4	1477.5	1693.2	1948.0	2250.7	2606.5	3041.3	3364.6	3532.6
48°	1355.3	1272.1	1389.2	1482.9	1704.1	1932.3	2268.6	2615.3	3060.4	3378.3	3522.4
49°	1279.5	1257.1	1312.0	1490.2	1683.5	1906.2	2273.6	2630.4	3077.7	3387.5	3509.1
50°	1266.3	1263.4	1293.5	1497.3	1630.8	1887.7	2277.2	2648.5	3093.1	3391.6	3492.9
51°	1276.7	1270.3	1303.9	1477.8	1601.3	1879.6	2274.1	2664.7	3104.1	3390.7	3474.0
52°	1287.7	1277.3	1313.6	1400.0	1610.4	1889.0	2274.8	2680.0	3112.5	3387.1	3450.5
53°	1297.5	1280.4	1323.0	1370.0	1623.0	1896.6	2283.9	2692.8	3117.1	3379.6	3424.6
54°	1302.4	1188.2	1328.4	1380.5	1631.2	1903.7	2286.3	2703.3	3115.1	3371.6	3394.1
55°	1218.9	1131.4	1245.3	1392.8	1639.0	1913.0	2287.9	2708.4	3108.2	3359.7	3361.8
56°	1157.1	1127.4	1182.7	1405.5	1641.5	1927.1	2288.1	2705.6	3096.4	3346.3	3326.2
57°	1152.9	1129.4	1176.0	1414.7	1601.5	1932.6	2285.1	2696.4	3081.0	3329.1	3286.4
58°	1154.7	1119.9	1177.4	1349.1	1544.1	1935.3	2283.9	2684.5	3064.7	3305.1	3243.8
59°	1133.1	987.1	1159.6	1290.4	1538.3	1913.9	2280.5	2672.6	3048.1	3278.1	3197.6
60°	1016.1	950.7	1041.6	1290.7	1555.1	1866.7	2264.6	2658.6	3027.4	3246.6	3147.0
61°	993.6	894.9	1016.0	1294.4	1573.0	1843.7	2245.5	2640.8	3002.1	3209.1	3093.0
62°	990.5	839.0	1009.7	1251.4	1588.9	1843.2	2234.6	2618.5	2971.4	3165.3	3036.9
63°	932.9	783.8	950.5	1172.9	1556.3	1842.6	2215.0	2588.9	2933.7	3114.0	2978.2
64°	875.2	767.9	891.3	1157.4	1500.7	1837.5	2189.1	2550.1	2888.1	3058.6	2918.8
65°	817.5	701.6	831.6	1147.6	1492.5	1816.3	2152.9	2502.2	2831.9	2997.9	2854.6
66°	727.2	586.7	743.4	1045.7	1493.0	1755.0	2107.5	2445.0	2765.0	2932.2	2787.1
67°	635.4	559.4	648.4	1023.7	1431.4	1714.7	2053.3	2375.8	2692.1	2856.6	2719.9
68°	571.6	390.6	586.5	983.5	1396.9	1716.4	1979.5	2256.5	2599.0	2773.0	2653.3
69°	465.7	322.5	478.5	897.6	1383.7	1712.9	1890.4	2080.3	2470.0	2681.0	2589.0
70°	373.0	222.2	383.7	811.7	1313.6	1699.2	1767.0	1849.6	2307.8	2579.6	2520.4
71°	256.5	121.9	256.2	726.0	1282.3	1630.3	1612.3	1636.3	2104.4	2459.4	2448.6
72°	141.7	22.3	132.5	652.5	1228.4	1541.4	1447.5	1440.8	1888.6	2323.3	2376.6
73°	119.3	0.3	107.5	575.7	1173.5	1449.6	1287.7	1246.0	1677.4	2158.8	2296.1
74°	96.9	0.2	82.6	473.5	1092.2	1348.8	1139.3	1014.3	1468.1	1972.0	2201.9
75°	74.6	0.2	71.7	415.5	1001.4	1230.6	915.3	710.6	1218.6	1765.0	2070.6
76°	56.8	0.2	57.1	369.4	873.1	1112.9	691.4	411.7	881.9	1546.5	1894.4
77°	40.0	0.3	45.2	325.6	744.8	943.2	467.3	264.5	525.3	1314.1	1648.4
78°	29.9	0.3	36.6	282.2	616.6	773.4	240.6	120.8	393.1	1029.4	1329.5
79°	29.4	0.3	36.4	234.6	493.3	602.5	157.1	92.2	262.8	696.1	963.8
80°	39.4	0.4	43.9	203.1	383.1	344.5	74.6	78.2	132.5	406.8	599.7
81°	48.3	0.4	45.4	188.7	287.9	249.9	59.8	66.6	112.7	270.0	439.5
82°	42.6	0.5	28.3	175.9	223.3	155.2	49.2	56.0	96.3	135.3	283.3
83°	26.6	0.5	20.1	133.4	167.7	61.1	40.1	46.5	79.4	103.3	127.0
84°	19.5	0.6	11.9	90.8	112.0	50.9	32.3	38.1	62.9	85.1	105.6
85°	12.4	0.7	4.0	48.7	56.9	40.2	25.7	29.7	49.1	66.8	89.7
86°	5.5	0.7	3.6	24.8	31.7	29.9	19.8	21.3	39.4	51.8	74.7
87°	4.0	0.8	3.5	17.4	18.1	21.5	14.5	14.3	29.8	40.0	58.0
88°	2.9	0.9	3.1	10.1	12.6	15.0	10.3	8.3	20.2	29.1	40.3
89°	2.3	0.9	1.9	2.9	7.2	8.5	6.0	3.6	12.4	18.1	28.8

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
91°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
93°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
94°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
96°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
98°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
99°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
101°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
103°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
104°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
106°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
108°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
109°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
111°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
113°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
114°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
116°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
118°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
119°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
121°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
123°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
124°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
126°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
128°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
129°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
131°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
133°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
134°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
136°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
138°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
144°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
146°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
151°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
159°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
161°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
163°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
164°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
166°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
168°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
169°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
171°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
173°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
174°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
176°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
178°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
179°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P1445011
CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	165°	180°	195°	210°	225°	240°	255°	270°	285°	300°	315°
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
0°	1654.7	1654.7	1654.7
1°	1679.3	1682.8	1684.4
2°	1709.3	1716.1	1718.6
3°	1742.2	1752.4	1755.9
4°	1779.2	1793.5	1797.7
5°	1819.4	1839.1	1845.2
6°	1863.9	1889.0	1896.4
7°	1912.7	1942.3	1951.9
8°	1965.4	2000.7	2012.4
9°	2022.3	2064.4	2078.0
10°	2081.9	2133.4	2149.1
11°	2148.5	2207.0	2225.9
12°	2219.2	2287.6	2308.3
13°	2295.3	2372.5	2397.1
14°	2376.7	2464.2	2492.6
15°	2461.9	2561.2	2595.0
16°	2548.7	2660.2	2700.5
17°	2636.9	2762.0	2807.8
18°	2725.6	2862.9	2911.0
19°	2811.4	2960.1	3009.7
20°	2894.3	3050.3	3100.7
21°	2972.0	3132.4	3180.9
22°	3044.5	3207.4	3251.0
23°	3114.0	3272.8	3315.7
24°	3178.6	3331.2	3371.8
25°	3238.3	3382.5	3420.9
26°	3292.8	3427.7	3462.6
27°	3344.0	3466.7	3499.4
28°	3388.3	3500.7	3530.7
29°	3428.9	3528.9	3557.0
30°	3463.9	3552.1	3578.9
31°	3495.7	3571.9	3596.2
32°	3523.0	3587.7	3608.5
33°	3546.4	3598.9	3617.9
34°	3564.9	3606.6	3624.0
35°	3580.2	3610.6	3626.2
36°	3592.1	3610.1	3625.2
37°	3601.1	3607.9	3620.6
38°	3606.5	3603.5	3613.5
39°	3608.4	3595.6	3604.3
40°	3607.3	3586.2	3592.1
41°	3603.6	3575.0	3576.0
42°	3596.7	3560.9	3557.9
43°	3586.5	3544.5	3535.3
44°	3574.2	3525.3	3508.8

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
45°	3558.7	3503.0	3479.0
46°	3541.3	3477.5	3444.3
47°	3520.5	3447.2	3405.2
48°	3498.1	3413.9	3364.3
49°	3471.4	3376.3	3318.4
50°	3439.8	3335.1	3267.2
51°	3403.7	3288.8	3211.6
52°	3361.8	3236.3	3150.1
53°	3316.4	3181.1	3086.6
54°	3266.8	3119.8	3019.1
55°	3215.4	3056.5	2948.6
56°	3159.3	2987.4	2876.5
57°	3100.6	2917.0	2803.8
58°	3038.4	2844.4	2729.0
59°	2973.7	2770.8	2652.3
60°	2908.5	2694.8	2571.1
61°	2843.4	2617.5	2487.8
62°	2778.0	2537.7	2400.6
63°	2715.0	2460.6	2315.8
64°	2655.8	2386.1	2234.5
65°	2598.4	2317.3	2169.8
66°	2542.7	2259.5	2121.4
67°	2489.7	2217.6	2094.2
68°	2440.9	2188.5	2063.8
69°	2397.5	2157.2	1995.8
70°	2363.4	2106.1	1864.5
71°	2328.5	2006.3	1662.3
72°	2285.5	1834.1	1455.2
73°	2222.0	1611.0	1234.3
74°	2106.0	1364.7	983.7
75°	1921.1	1104.8	669.2
76°	1685.7	808.4	371.0
77°	1418.6	482.2	286.7
78°	1099.1	362.0	204.4
79°	722.4	245.3	122.0
80°	405.6	128.5	108.0
81°	305.4	112.0	96.6
82°	212.4	99.0	86.2
83°	119.4	87.2	76.5
84°	98.9	76.0	67.4
85°	80.2	65.7	58.6
86°	65.5	56.3	50.1
87°	52.5	47.4	41.8
88°	40.2	39.7	36.1
89°	31.1	32.0	30.5

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
90°	0.0	0.0	0.0
91°	0.0	0.0	0.0
92°	0.0	0.0	0.0
93°	0.0	0.0	0.0
94°	0.0	0.0	0.0
95°	0.0	0.0	0.0
96°	0.0	0.0	0.0
97°	0.0	0.0	0.0
98°	0.0	0.0	0.0
99°	0.0	0.0	0.0
100°	0.0	0.0	0.0
101°	0.0	0.0	0.0
102°	0.0	0.0	0.0
103°	0.0	0.0	0.0
104°	0.0	0.0	0.0
105°	0.0	0.0	0.0
106°	0.0	0.0	0.0
107°	0.0	0.0	0.0
108°	0.0	0.0	0.0
109°	0.0	0.0	0.0
110°	0.0	0.0	0.0
111°	0.0	0.0	0.0
112°	0.0	0.0	0.0
113°	0.0	0.0	0.0
114°	0.0	0.0	0.0
115°	0.0	0.0	0.0
116°	0.0	0.0	0.0
117°	0.0	0.0	0.0
118°	0.0	0.0	0.0
119°	0.0	0.0	0.0
120°	0.0	0.0	0.0
121°	0.0	0.0	0.0
122°	0.0	0.0	0.0
123°	0.0	0.0	0.0
124°	0.0	0.0	0.0
125°	0.0	0.0	0.0
126°	0.0	0.0	0.0
127°	0.0	0.0	0.0
128°	0.0	0.0	0.0
129°	0.0	0.0	0.0
130°	0.0	0.0	0.0
131°	0.0	0.0	0.0
132°	0.0	0.0	0.0
133°	0.0	0.0	0.0
134°	0.0	0.0	0.0

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
135°	0.0	0.0	0.0
136°	0.0	0.0	0.0
137°	0.0	0.0	0.0
138°	0.0	0.0	0.0
139°	0.0	0.0	0.0
140°	0.0	0.0	0.0
141°	0.0	0.0	0.0
142°	0.0	0.0	0.0
143°	0.0	0.0	0.0
144°	0.0	0.0	0.0
145°	0.0	0.0	0.0
146°	0.0	0.0	0.0
147°	0.0	0.0	0.0
148°	0.0	0.0	0.0
149°	0.0	0.0	0.0
150°	0.0	0.0	0.0
151°	0.0	0.0	0.0
152°	0.0	0.0	0.0
153°	0.0	0.0	0.0
154°	0.0	0.0	0.0
155°	0.0	0.0	0.0
156°	0.0	0.0	0.0
157°	0.0	0.0	0.0
158°	0.0	0.0	0.0
159°	0.0	0.0	0.0
160°	0.0	0.0	0.0
161°	0.0	0.0	0.0
162°	0.0	0.0	0.0
163°	0.0	0.0	0.0
164°	0.0	0.0	0.0
165°	0.0	0.0	0.0
166°	0.0	0.0	0.0
167°	0.0	0.0	0.0
168°	0.0	0.0	0.0
169°	0.0	0.0	0.0
170°	0.0	0.0	0.0
171°	0.0	0.0	0.0
172°	0.0	0.0	0.0
173°	0.0	0.0	0.0
174°	0.0	0.0	0.0
175°	0.0	0.0	0.0
176°	0.0	0.0	0.0
177°	0.0	0.0	0.0
178°	0.0	0.0	0.0
179°	0.0	0.0	0.0

REPORT NUMBER: P1445011

CATALOG NUMBER: XAS180-SFPM (4000K-72W-T4-HSS)

CANDELA DISTRIBUTION (continued):

	330°	345°	360°
180°	0.0	0.0	0.0

(END OF REPORT)